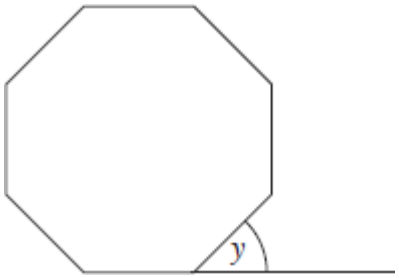
Q1.

(a) The diagram shows a regular octagon.

Not drawn accurately



The base line of the octagon is extended.

Work out the size of angle y.

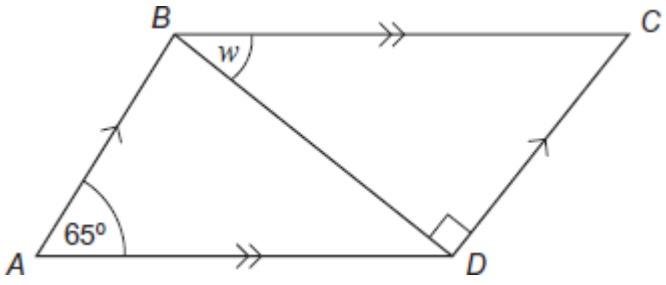
.....

Answer ..... degrees

(2)

(b) $ABCD$ is a parallelogram.
BD is a diagonal.

Not drawn accurately



Work out the size of angle w.

.....

.....

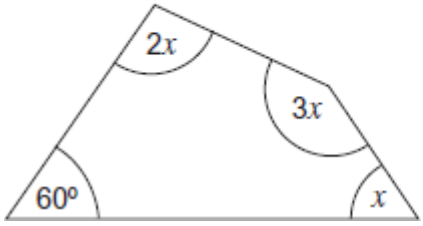
Answer ..... degrees

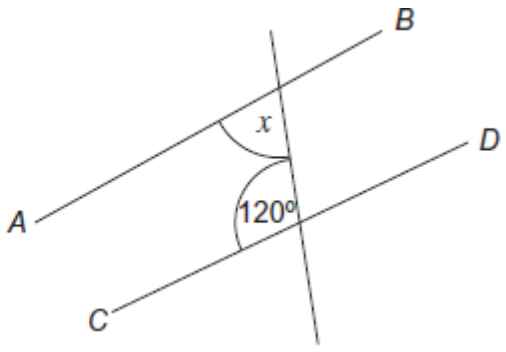
(3)

(Total 5 marks)

Q2.

Not drawn accurately





Show that *AB* is **not** parallel to *CD*.

.....

.....

.....

.....

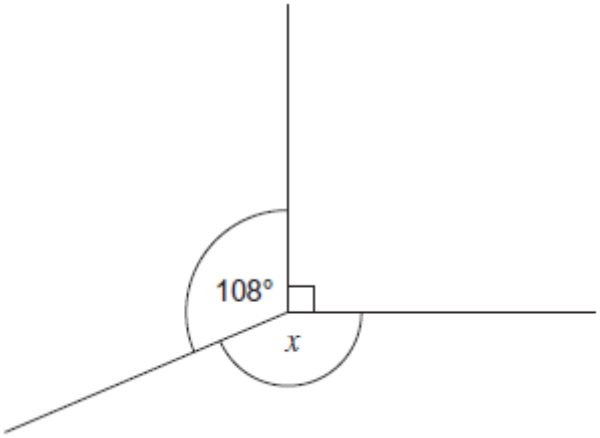
.....

.....

(Total 4 marks)

Q3.(a) Work out the size of angle x

Not drawn accurately



.....

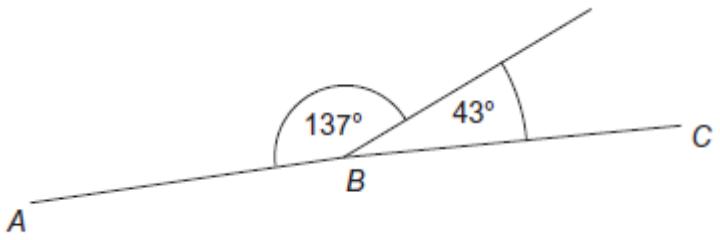
.....

Answer ..... degrees

(2)

(b)

Not drawn accurately



Give a reason why, if drawn accurately, *ABC* would be a straight line.

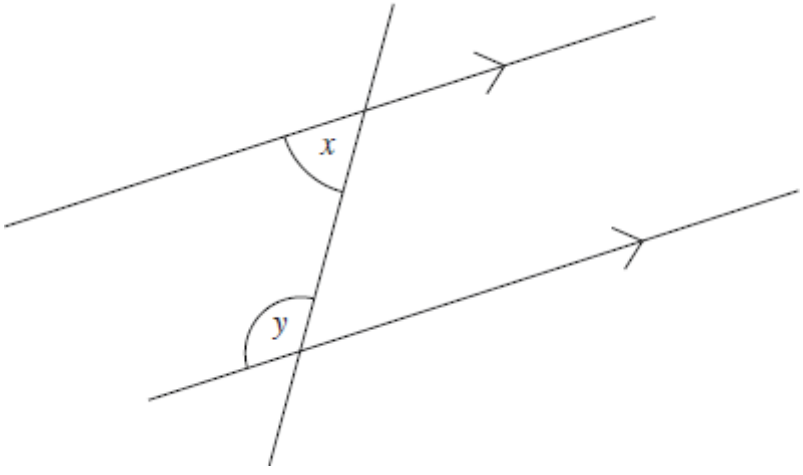
.....

.....

(1)
(Total 3 marks)

Q4.

Not drawn accurately



(a) Use the diagram to write an equation connecting x and y.

Answer .....

(1)

(b) The ratio $x : y = 2 : 3$

Use this information to write another equation connecting x and y.

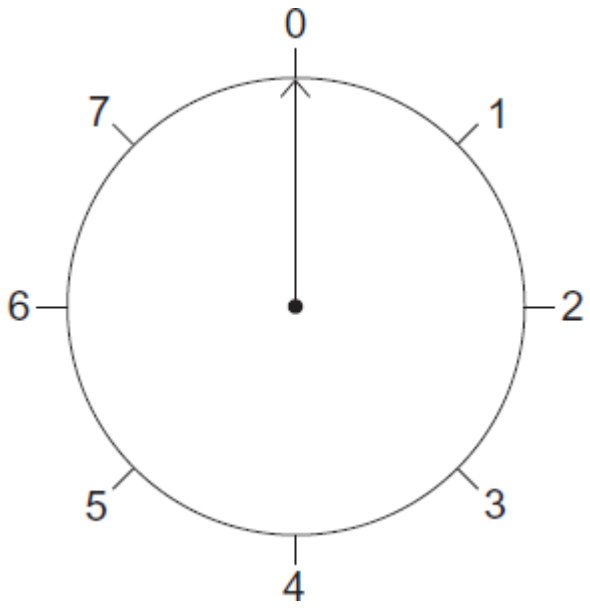
.....

.....

Answer .....

(1)
(Total 2 marks)

Q5. A circular spinner has 8 **equal** divisions as shown.



(a) The arrow turns clockwise from 0 to 4

What angle does it turn through?

Answer ..... degrees

(1)

(b) The arrow turns 45° clockwise from 5

What number does it point to?

Answer .....

(1)

(c) The arrow turns anti-clockwise from 7 to 4

What angle does it turn through?

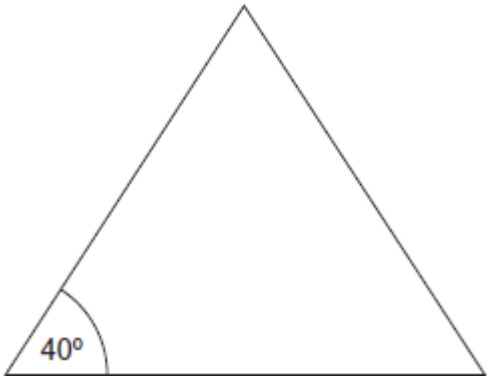
Answer ..... degrees

(1)

(Total 3 marks)

Q6. The diagram shows an **isosceles** triangle.

Not drawn accurately



Work out the possible **sizes** of the other **two** angles.
Give both **different** pairs of answers.

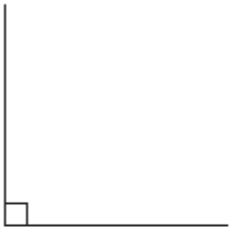
40° and ..... and .....

or 40° and ..... and .....

(Total 3 marks)

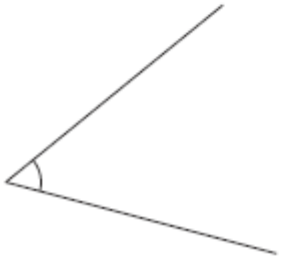
Q7. Draw a line to match each angle to the correct name.

right angle



reflex angle

acute angle



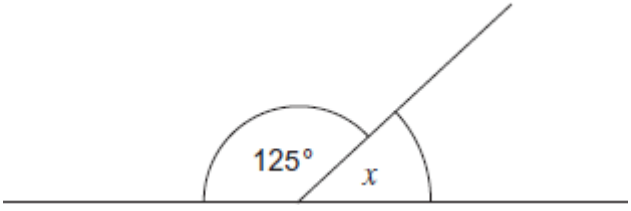
obtuse angle

(Total 2 marks)

Q8.

(a) Work out the size of angle x.

Not drawn accurately



.....

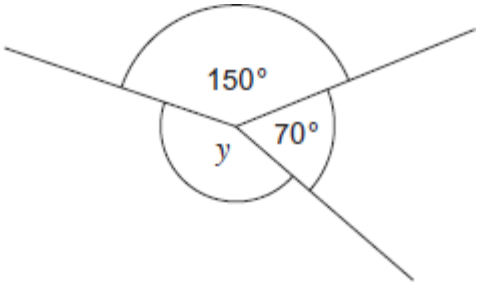
.....

Answer ..... degrees

(1)

(b) Work out the size of angle y.

Not drawn accurately



.....

.....

.....

Answer ..... degrees

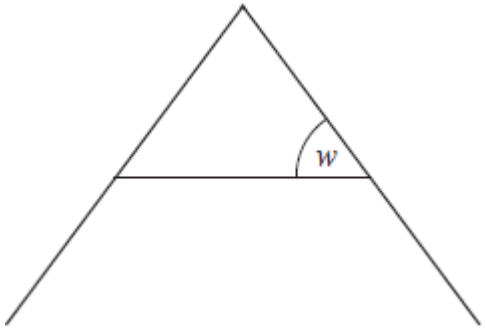
(2)
(Total 3 marks)

Q9.

Jenna uses straight rods to make letters and numbers.

(a)

Not drawn accurately



The triangle is equilateral.

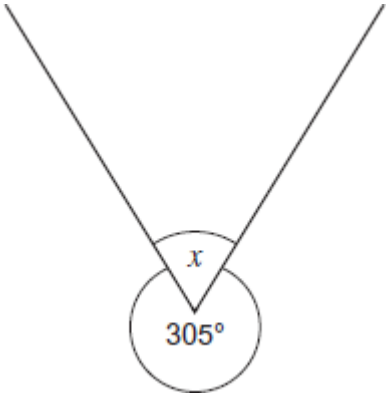
What is the size of angle w?

Answer ..... degrees

(1)

(b)

Not drawn accurately



Work out the size of angle x.

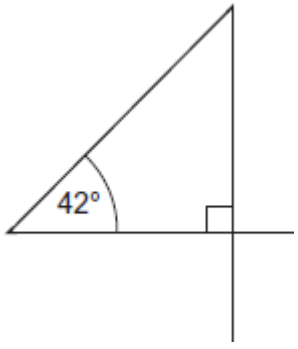
.....

Answer ..... degrees

(1)

(c)

Not drawn accurately



Is the triangle isosceles?
Give a reason for your answer.

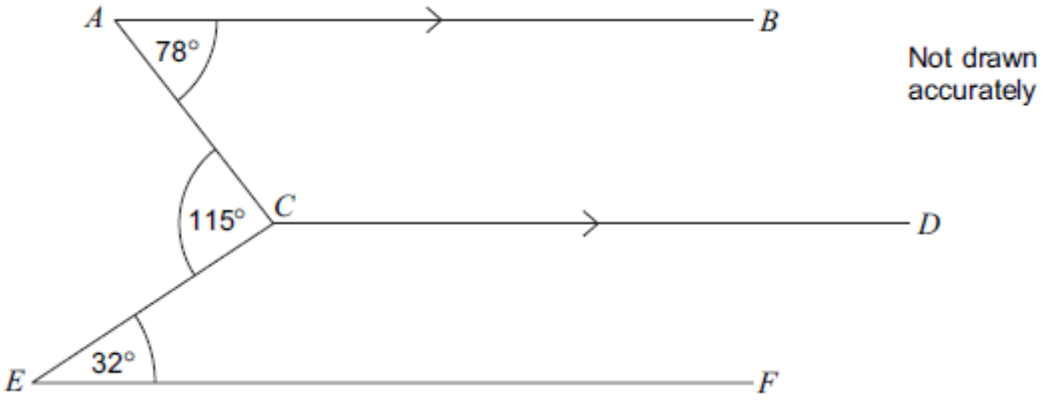
.....

.....

.....

(1)
(Total 3 marks)

Q10.



AB is parallel to CD.

Is EF parallel to CD?
You **must** show your working.

.....

.....

.....

.....

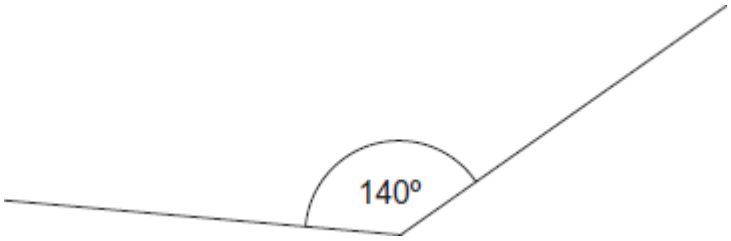
.....

.....

(Total 3 marks)

Q11. The diagram shows an interior angle of a **regular** polygon.

Not drawn accurately



(a) Work out the size of an exterior angle of the polygon.

.....

Answer ..... degrees

(1)

(b) Work out the number of sides of the polygon.

.....

.....

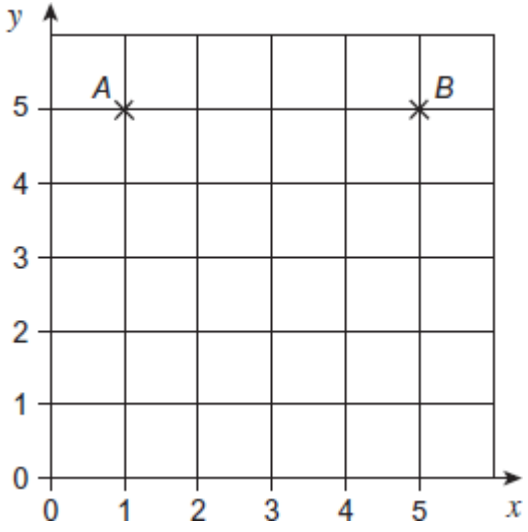
.....

Answer .....

(2)

(Total 3 marks)

Q12. Points *A* and *B* are shown on the centimetre grid.



(a) Write down the coordinates of the midpoint of *AB*.

Answer (..... , ...)

(1)

(b) Point *C* is plotted so that

its *y*-coordinate is 3

and

ABC is a right-angled triangle.

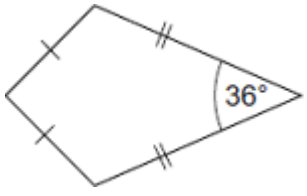
Write down the coordinates of **three** possible points for *C*.

Answer (..... , 3), (..... , 3) and (..... , 3)

(3)
(Total 4 marks)

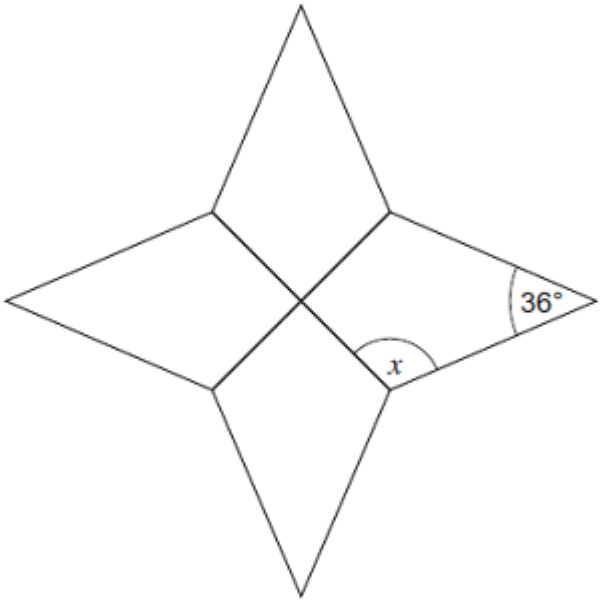
Q13. The diagram shows a kite.

Not drawn accurately



Four identical kites are joined to make this shape.

Not drawn accurately



Work out the size of angle x.

.....

.....

.....

.....

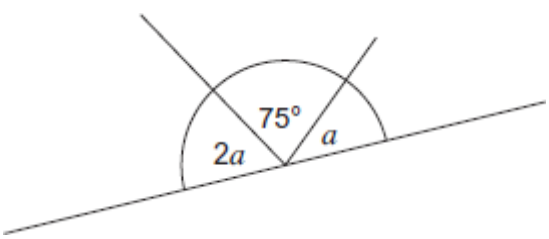
Answer ..... degrees

(Total 4 marks)

Q14.

(a) Three angles form a straight line.

Not drawn accurately



Calculate the value of a.

.....

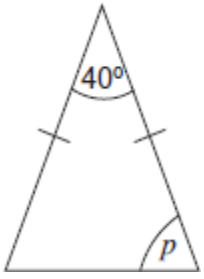
.....

Answer ..... degrees

(3)

(b) This triangle is isosceles.

Not drawn accurately



Calculate the size of angle p.

.....

.....

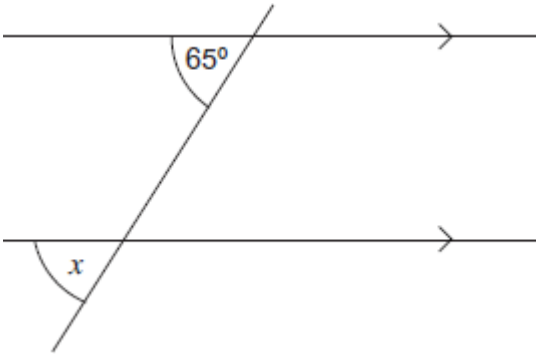
Answer ..... degrees

(2)
(Total 5 marks)

Q15.

Write down the size of angle x.
Give a reason for your answer.

Not drawn accurately



Answer ..... degrees

Reason .....

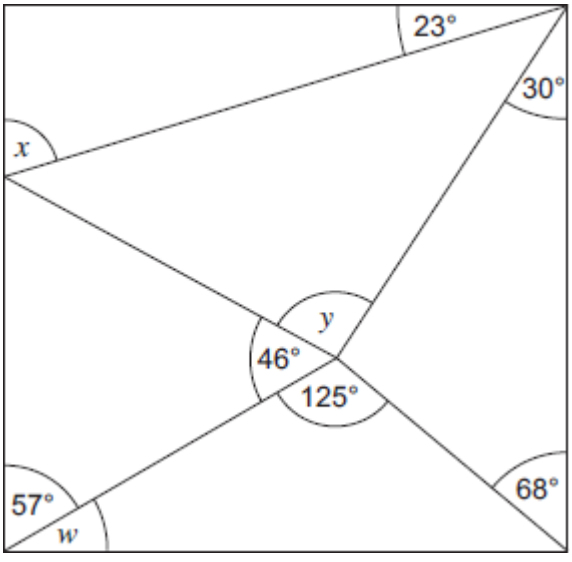
.....

(Total 2 marks)

Q16.

A mirror is made from triangles as shown.
The mirror is a square.

Not drawn accurately



(a) Work out angle w.

.....

Answer ..... degrees

(1)

(b) Work out angle x.

.....

.....

Answer ..... degrees

(2)

(c) Work out angle y.

.....

.....

.....

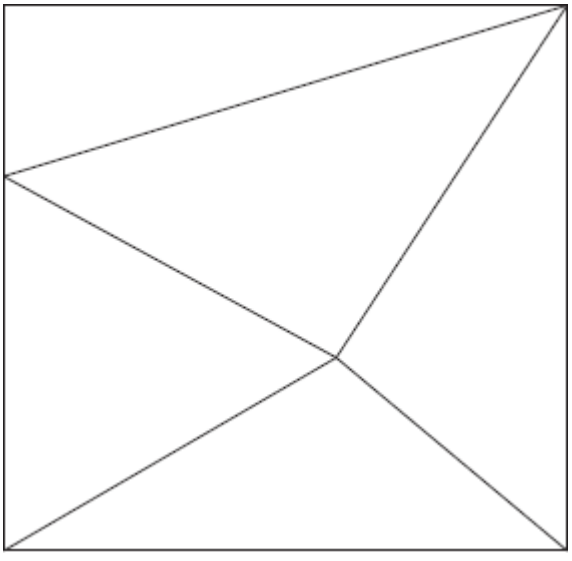
.....

Answer ..... degrees

(3)

(d) The area of the square mirror is 4900 cm^2.

Not drawn accurately



Work out the perimeter of the mirror.

.....

.....

.....

.....

.....

Answer ..... cm

(3)
(Total 9 marks)